

УДК 005.591.6:330.322:502.131.1:658

JEL Classification: M14, O32, G31, Q56, M10

DOI: 10.31713/ve2202630

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DEVELOPING AN ESG-ORIENTED MANAGEMENT MECHANISM FOR ENTERPRISE INNOVATION AND INVESTMENT ACTIVITY

The article explores the formation of an ESG-oriented mechanism for managing the innovation and investment activity of an enterprise. It emphasises the growing importance of integrating environmental, social and governance criteria into investment decision-making, innovation project selection, risk assessment and performance evaluation. The study substantiates that traditional approaches focused mainly on financial indicators are no longer sufficient under the conditions of sustainability requirements, stakeholder pressure and increasing non-financial risks. The article analyses recent Ukrainian and international research on ESG, innovation development and sustainable investment. It proposes a conceptual mechanism that combines strategic priorities, ESG diagnostics, project evaluation, financing, organisational implementation, monitoring and feedback. The practical value of the study lies in outlining how enterprises can use ESG criteria to select innovation and investment projects more consciously, attract responsible financing, reduce long-term risks and strengthen investment attractiveness.

Keywords: ESG; ESG-oriented management mechanism; innovation and investment activity; managerial decision-making; innovation management; investment management; sustainable development; responsible financing; ESG KPIs; enterprise.

Formulation of the scientific problem and its significance. The growing role of ESG principles has significantly changed the way enterprises approach innovation and investment decisions. Today, the choice of an innovation project or investment direction is no longer based only on expected profitability, payback period, or technological potential. Enterprises are increasingly expected to consider the environmental

consequences of their activities, the social effects of managerial decisions, and the quality of corporate governance. As a result, innovation and investment management is gradually moving beyond a purely financial logic and becoming part of a broader system of responsible and sustainable business development. Despite the increasing attention to ESG issues, their integration into innovation and investment activity remains insufficiently structured. In the scientific literature, ESG management, innovation development, and investment decision-making are often examined as related but relatively separate areas. This leads to a certain fragmentation in understanding how ESG criteria should influence the selection, evaluation, financing, and implementation of innovation and investment projects at the enterprise level.

In this context, there is a need to substantiate a coherent ESG-oriented mechanism that would connect strategic priorities, investment resources, innovation potential, risk assessment, and stakeholder expectations within a single management logic. Such a mechanism should not be limited to the formal inclusion of ESG indicators in corporate reporting. Rather, it should serve as a managerial basis for aligning innovation and investment decisions with the principles of sustainable development. This issue is particularly relevant because innovation and investment activity directly determines the future trajectory of enterprise development. If ESG criteria are ignored, investment decisions may appear economically justified in the short term but become vulnerable to reputational risks, regulatory pressure, inefficient use of resources, or declining stakeholder trust. Conversely, the consistent integration of ESG principles can improve the quality of managerial decisions, increase investment attractiveness, and strengthen the long-term sustainability of the enterprise.

Thus, the relevance of the research is determined by the need to develop a conceptual basis for combining ESG principles with the management of innovation and investment activity. This approach makes it possible to consider innovation and investment decisions not only as instruments of economic growth, but also as tools for creating long-term environmental, social, and governance value.

Analysis of recent research and publications. Recent research increasingly interprets ESG not merely as a system of non-financial reporting, but as a factor that influences investment decision-making, innovation development and long-term enterprise resilience. This tendency is reinforced by the expansion of sustainability disclosure

requirements, in particular the EU Corporate Sustainability Reporting Directive and the IFRS Sustainability Disclosure Standards, which increase the importance of information on sustainability-related risks and opportunities for investors and other stakeholders.

Among Ukrainian researchers, I. Makarenko substantiates the role of ESG criteria in investment screening and shows that ESG makes it possible to formalise corporate sustainability efforts through measurable investment criteria [1]. L. Bondarenko and A. Blavt analyse sustainable investment under martial law in Ukraine and emphasise the importance of clean energy, decarbonisation, social standards and transparent governance for investment decisions [2]. N. Horbal and Yu. Makarova focus on eco-innovations as a factor of sustainable development of Ukrainian enterprises [3], while I. Aliksieiev and B. Potopnyk consider innovative tools, digitalisation and ESG financing in the context of Ukraine's post-war economic transformation [4].

Foreign studies mainly examine empirical links between ESG performance, innovation activity and investment behaviour. H. Wan, J. Fu and X. Zhong demonstrate that ESG performance can improve firms' innovation efficiency [5], while X. Liu, N. Huang, W. Su and H. Zhou show that both radical and incremental green innovation positively affect corporate ESG performance [6]. Zhang et al. also emphasise that ESG performance contributes to green innovation by reducing financing constraints and strengthening human capital [7]. At the same time, Z. Yu, U. Farooq, M. M. Alam and J. Dai reveal that ESG performance influences the structure of corporate investment, which confirms the need to balance financial and sustainability-oriented priorities [8].

Thus, recent publications provide a solid basis for understanding the relationship between ESG, innovation, investment and sustainable enterprise development. However, most studies analyse these issues either from the perspective of ESG reporting, sustainable finance, eco-innovation or investment attractiveness. Less attention has been paid to the formation of an integrated ESG-oriented mechanism that would combine strategic priorities, innovation potential, investment resources, ESG criteria and monitoring tools within a single system of enterprise management.

The article aims to substantiate the conceptual foundations for forming an ESG-oriented mechanism for managing the innovation and investment activity of an enterprise. The study focuses on identifying how environmental, social and governance criteria can be integrated into the

processes of selecting, evaluating, financing and implementing innovation and investment projects. Particular attention is paid to the transition from traditional investment decision-making, primarily based on financial indicators, to a broader management approach that also considers sustainability-related risks, stakeholder expectations and long-term enterprise resilience.

To achieve this aim, the article sets the following objectives: to clarify the theoretical basis of ESG-oriented management of innovation and investment activity; to determine the role of ESG criteria in the selection and evaluation of innovation and investment projects; to develop a conceptual model of the ESG-oriented management mechanism; and to outline practical directions for its implementation at the enterprise level.

Presentation of the main material. The formation of an ESG-oriented mechanism for managing enterprise innovation and investment activity requires a clear understanding of how ESG principles interact with innovation development and investment decision-making. These components should not be viewed as separate areas of management. In practice, they increasingly shape a common logic of enterprise development, where innovation determines the direction of renewal, investment provides the necessary resources, and ESG criteria influence the justification and quality of managerial decisions.

Traditionally, innovation and investment activity has been associated with technological modernisation, business growth, competitiveness, profitability and return on invested capital. Such an approach remains important, but it is no longer sufficient for enterprises operating under growing sustainability requirements, regulatory pressure and stakeholder expectations. An innovation project may demonstrate attractive financial indicators, but at the same time create environmental risks, worsen working conditions, increase reputational vulnerability or reveal weaknesses in corporate governance. Therefore, the assessment of innovation and investment activity should include not only economic parameters, but also environmental, social and governance dimensions. In this context, ESG criteria influence several key management decisions. They affect the choice of innovation projects, since priority is increasingly given to initiatives that contribute to resource efficiency, energy saving, decarbonisation, safer working conditions, social value creation or greater transparency of business processes. They also shape the way enterprises attract investment, as

investors and financial institutions pay increasing attention to sustainability-related risks, governance quality and the long-term viability of business models. In addition, ESG principles expand the understanding of risk by including environmental, social, reputational, regulatory and governance-related threats. The environmental component of ESG is related to the enterprise's ability to reduce its negative impact on the environment and implement innovations aimed at resource conservation, waste reduction, energy efficiency and cleaner technologies. The social component reflects the impact of managerial decisions on employees, consumers, local communities and other stakeholders. It includes occupational safety, human capital development, inclusiveness, social responsibility and the quality of stakeholder relations. The governance component concerns transparency, accountability, ethical conduct, compliance, risk management and the ability of management to make balanced strategic decisions.

The theoretical basis of ESG-oriented management may be explained through several complementary approaches. The stakeholder approach emphasises that enterprise development depends on the interests and expectations of different groups, including investors, employees, consumers, partners, communities and public institutions. The concept of sustainable development highlights the need to balance economic, environmental and social goals. The resource-based approach draws attention to internal capabilities, knowledge, technologies and organisational competencies that allow an enterprise to implement responsible innovations. The risk-oriented approach makes it possible to identify ESG-related risks and include them in investment justification and project evaluation. Accordingly, ESG-oriented management of innovation and investment activity can be understood as a system of principles, criteria, methods and managerial actions aimed at aligning innovation potential and investment resources with the goals of sustainable enterprise development. Its purpose is not to replace financial efficiency with non-financial indicators, but to ensure that investment decisions are assessed together with their long-term environmental, social and governance consequences.

An ESG-oriented mechanism for managing innovation and investment activity may therefore be defined as an integrated system of managerial goals, principles, methods, instruments, responsible actors and feedback procedures aimed at aligning investment decisions and

innovation projects with the priorities of sustainable development. Its role is to provide a management logic within which ESG criteria are embedded in the cycle of decision-making — from defining innovation priorities to selecting projects, attracting financial resources, assessing risks and evaluating outcomes (Fig. 1).

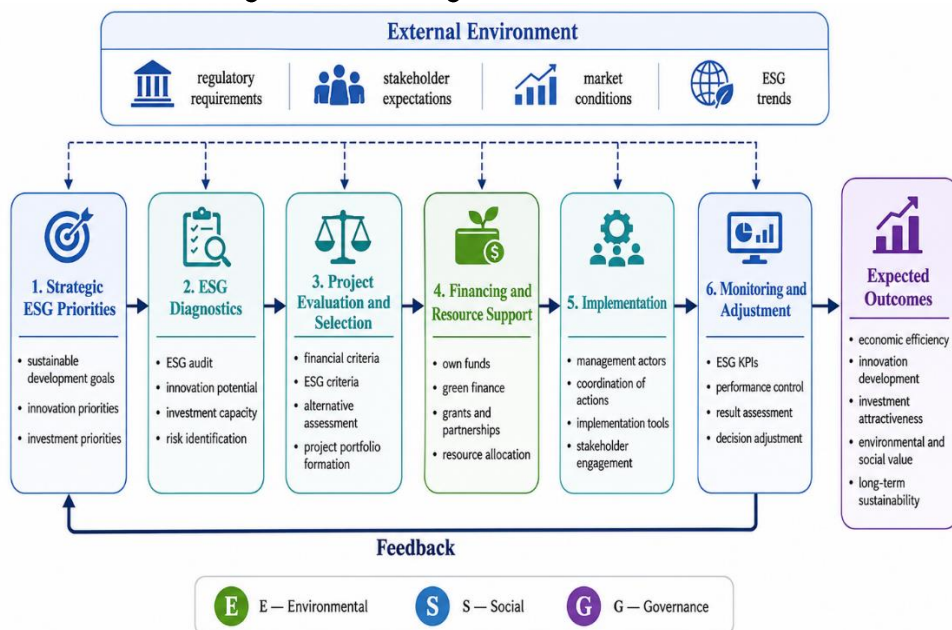


Fig. 1. Conceptual model of the ESG-oriented mechanism for managing enterprise innovation and investment activity

The functioning of such a mechanism begins with the formulation of strategic priorities. At this stage, the enterprise determines which areas of innovation and investment activity correspond to its long-term development goals and sustainability commitments. These priorities may relate to energy-efficient technologies, cleaner production, digital solutions for resource management, responsible employment practices, human capital development, transparent governance or innovations aimed at reducing environmental and social risks. The next stage involves a comprehensive diagnosis of the enterprise's current position. This includes an ESG audit, assessment of innovation potential, analysis of investment capacity and identification of internal limitations. Particular attention should be paid to sustainability-related risks, including environmental threats, regulatory changes, reputational vulnerability, social tensions, weaknesses in governance and possible conflicts with

stakeholder expectations. Such diagnostics forms the information basis for project evaluation and prevents ESG integration from remaining merely declarative.

At the project selection stage, innovation and investment initiatives should be evaluated using a combined system of criteria. Financial indicators may include investment volume, payback period, profitability, net present value, internal rate of return and the overall level of project risk. ESG criteria, in turn, reflect the project's environmental impact, social effects and governance quality. Their combination allows the enterprise to compare alternatives by expected return, risk level and contribution to sustainable development. Based on the results of evaluation, the enterprise forms a portfolio of ESG-oriented innovation and investment projects. Priority should be given to initiatives that combine economic feasibility with measurable sustainability effects. This does not mean that each project must equally cover all three ESG dimensions. Rather, the task is to achieve a reasonable balance between financial return, innovation potential, ESG value and acceptable risk.

A separate element of the mechanism is the choice of financing sources. Depending on the scale, risk profile and expected effects of the project, the enterprise may use its own funds, bank loans, green financing, grant support, public-private partnerships, venture capital, international development programmes or other investment instruments. ESG orientation can strengthen investment attractiveness, as investors and financial institutions increasingly pay attention to sustainability risks, governance transparency and the long-term resilience of business models. The implementation of selected projects requires a clear distribution of responsibilities. Top management defines strategic priorities and approves key investment decisions. Financial units assess economic feasibility and financing options. Innovation departments are responsible for the development and introduction of new solutions. ESG managers or designated specialists coordinate sustainability criteria, risk assessment and reporting procedures. Project teams ensure operational implementation, while external stakeholders may provide expertise, financing, partnership support or social legitimacy. The final stage is monitoring and adjustment. The enterprise should assess whether the project has achieved the planned financial indicators and produced the expected ESG effects. For this purpose, a system of ESG KPIs may be used, including indicators of energy savings, emissions reduction, resource efficiency, occupational safety, employee

development, stakeholder satisfaction, compliance and transparency of decision-making. Monitoring results should be used to revise strategic priorities, project selection criteria, investment policy and risk management procedures. In this way, feedback becomes a necessary condition for the effective functioning of the mechanism and prevents ESG practices from becoming purely formal.

The practical implementation of the ESG-oriented mechanism requires more than the formal inclusion of sustainability indicators in management procedures. It should begin with the adaptation of strategic planning, investment analysis and innovation project management to the ESG priorities that are most relevant to the company's business model, industry profile and stakeholder environment. In this regard, ESG integration becomes a managerial task: the enterprise has to determine which sustainability issues are strategically significant and how they can be translated into innovation and investment priorities.

A necessary condition for implementation is the creation of an internal analytical framework. This involves ESG diagnostics, assessment of innovation potential, evaluation of investment capacity and identification of risks that may affect project outcomes. The practical value of such diagnostics lies in its ability to reveal the gap between declared sustainability intentions and the real organisational, technological and financial readiness of the enterprise. On this basis, ESG criteria can be included in project evaluation together with traditional financial indicators, allowing management to compare alternatives by expected profitability, risk level and sustainability effects. The mechanism can be effectively applied when ESG-oriented projects are managed as part of a coherent investment portfolio rather than as isolated sustainability initiatives. Such a portfolio may combine projects aimed at resource efficiency, cleaner technologies, digital transparency, modernisation of production processes, improvement of working conditions or strengthening of internal control. The choice of financing instruments should correspond to the nature of these projects and may include own funds, bank lending, green finance, grant support, public-private partnerships and cooperation with responsible investors. The final practical requirement is the establishment of organisational responsibility and measurable feedback. ESG-oriented innovation and investment activity should involve top management, financial units, innovation departments, HR specialists, ESG coordinators, project teams and relevant external stakeholders. Their interaction has to be supported

by clear procedures, defined responsibilities and a system of ESG KPIs. Regular monitoring should show whether implemented projects contribute to economic results, resource efficiency, stakeholder trust, social value, governance transparency and sustainable development.

Conclusions. The study shows that the ESG approach changes the logic of managing enterprise innovation and investment activity. Investment decisions can no longer be justified only by expected profitability, technological feasibility or short-term efficiency. In the context of sustainability requirements, stakeholder pressure and growing non-financial risks, innovation and investment management should take into account environmental responsibility, social effects and the quality of governance. ESG criteria should be incorporated into the key stages of managerial decision-making: defining strategic priorities, diagnosing enterprise potential, evaluating innovation and investment projects, selecting financing sources, implementing initiatives and monitoring results. Financial indicators remain necessary, but they are insufficient for assessing the long-term value of projects. Their combination with environmental, social and governance criteria allows enterprises to evaluate economic return together with resource efficiency, stakeholder trust, risk reduction and managerial transparency.

The proposed ESG-oriented mechanism provides a conceptual basis for combining economic performance, innovation development and sustainability priorities within a coherent management process. Its application can support more balanced project selection, improve access to responsible financing, strengthen investment attractiveness and reduce long-term risks. At the same time, the mechanism contributes to the creation of value not only for owners and investors, but also for employees, consumers, communities and other stakeholders.

Further research may be directed towards the development of a methodology for the quantitative assessment of ESG efficiency in innovation and investment projects. Particular attention should be paid to the selection of measurable ESG indicators, the comparison of financial and non-financial project outcomes, and the assessment of their contribution to sustainable enterprise development.

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ФОРМУВАННЯ ESG-ОРІЄНТОВАНОГО МЕХАНІЗМУ УПРАВЛІННЯ ІННОВАЦІЙНО-ІНВЕСТИЦІЙНОЮ ДІЯЛЬНІСТЮ ПІДПРИЄМСТВА

У статті досліджено теоретико-концептуальні засади формування ESG-орієнтованого механізму управління інноваційно-інвестиційною діяльністю підприємства. Актуальність теми зумовлена посиленням ролі екологічних, соціальних та управлінських критеріїв у процесах прийняття інвестиційних рішень, вибору інноваційних проєктів, оцінювання ризиків і забезпечення довгострокової стійкості підприємства. Обґрунтовано, що традиційний підхід до управління інноваційно-інвестиційною діяльністю, орієнтований переважно на фінансові показники, вже не повною мірою відповідає сучасним умовам господарювання, оскільки не враховує впливу нефінансових ризиків, очікувань стейкхолдерів, регуляторного тиску та вимог сталого розвитку. У статті проаналізовано сучасні українські та зарубіжні наукові підходи до дослідження взаємозв'язку ESG-критеріїв, інноваційного розвитку, інвестиційної привабливості та сталого підприємництва. Визначено, що наявні дослідження переважно розглядають ESG у контексті нефінансової звітності, сталого фінансування, еко-інновацій або інвестиційного скринінгу, тоді як питання формування цілісного управлінського механізму інтеграції ESG-критеріїв в інноваційно-інвестиційну діяльність підприємства потребує подальшого наукового обґрунтування. Запропоновано ESG-орієнтований механізм управління інноваційно-інвестиційною діяльністю підприємства, що охоплює визначення стратегічних ESG-пріоритетів, проведення ESG-діагностики, оцінювання інноваційного та інвестиційного потенціалу, відбір проєктів за фінансовими й ESG-критеріями, формування портфеля відповідальних інноваційно-інвестиційних проєктів, вибір джерел фінансування, організаційну реалізацію, моніторинг результатів і коригування управлінських рішень. Такий підхід дає змогу узгодити економічну доцільність, інноваційність, екологічну відповідальність, соціальну цінність і якість корпоративного управління в межах єдиного



управлінського процесу. Обґрунтовано, що впровадження ESG-орієнтованого механізму сприяє більш збалансованому відбору інноваційно-інвестиційних проєктів, підвищенню якості інвестиційних рішень, зниженню довгострокових ризиків, посиленню довіри стейкхолдерів та зростанню інвестиційної привабливості підприємства. Перспективи подальших досліджень пов'язані з розробленням методичного підходу до кількісного оцінювання ESG-ефективності інноваційно-інвестиційних проєктів.

Ключові слова: ESG; ESG-орієнтований механізм управління; інноваційно-інвестиційна діяльність; прийняття управлінських рішень; інноваційний менеджмент; інвестиційний менеджмент; сталий розвиток; відповідальне фінансування; ESG-KPI; підприємство.

Отримано/Received: 20.04.2026
Прийнято до друку/Accepted: 18.05.2026
Опубліковано/Published: 29.06.2026



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